May 1977 Vol. II, No. 5

ENDANGERED SPECIES TECHNICAL BULLETIN

Department of the Interior • U.S. Fish and Wildlife Service • Endangered Species Program, Washington, D.C. 20240

Changes In ES Law Proposed

Legislation recently has been introduced in Congress to amend section 7 and other provisions of the Endangered Species Act of 1973.

A series of four essentially identical bills (H.R. 4167, H.R. 5002, H.R. 5079, and H.R. 6838) were introducted by Representative Robin Beard (R-Tenn.) to make section 7 nonretroactive. Beard's amendments would add new language to the section exempting all Federal public works projects on navigable waters from compliance if the "construction, reconstruction, or operation" of the project commenced prior to initiation of the listing process for a species occupying a habitat that would be affected adversely by the project.

If adopted, the proposal would permit the Tennessee Valley Authority (TVA) to complete its Tellico Dam and allow other ongoing water resource projects to proceed without running into possible violations of the law. The U.S. Court of Appeals for the Sixth District last January 31 permanently enjoined the TVA from closing the nearly completed dam and creating a reservoir that would destroy the Critical Habitat of the Endangered snail darter *(Percina tanasi)* lying along a 17-mile stretch of the river above the dam. The court said the injunction would remain in effect until either Congress exempts the dam from compliance or the snail darter is deleted from the Endangered list or its Critical Habitat is materially redefined (see February 1977 issue of BULLETIN).

In his legislation, Beard included a provision for the Secretaries of Interior and Commerce to take protective measures, such as transplantation, to minimize the adverse effects of a project on a Critical Habitat.

Bills have been introduced by Representative Albert Gore Jr. (D-Tenn.) and Representative John J. Duncan (R-Tenn.) (H.R. 4557 and H.R. 5879) to exempt the Columbia Dam and reservoir on the Duck River in Tennessee and the Tellico Dam from compliance with sections 4 and 9 of the Endangered

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EIS Study To Chart 10-Year Planning Goals of Endangered Species Program

The Endangered Species Program has begun a major initiative to prepare an environmental impact statement (EIS) that will spell out alternative goals, priorities, and impacts of the program through the 1980's.

An EIS team of Fish and Wildlife Service personnel is being formed under the direction of James M. Engel, who has been brought to Washington, D.C., from the Service's regional office in Minneapolis. Also included on the team will be Lori Williams (Washington), Lloyd Lyndvall (Baltimore), Jim Johnson (Albuquerque), and personnel from several other Service programs.

The team expects to produce a final draft within 12-to-18 months. It is estimated that the entire effort may cost the Service as much as $250,000.

Scope and Coverage

Still in the conceptual stage, the EIS is intended to cover the entire Endangered Species Program within the Service. It is not intended to address the activities of the Department of Commerce's National Marine Fisheries Service which, under the Endangered Species Act of 1973, has responsibility for marine species.

Engel expects the EIS to make a section-by-section analysis of the 1973 Act to determine the program's impact upon the environment and society.

Says Engel: "In addition, this will be a planning document that will set down on paper the kinds of actions we think will occur in the next 10 years. We will assess those actions as they relate to the environment, and lay out an array of alternatives to indicate what we believe can be done to improve the environment or to reduce man's impact upon it.

"We expect to address many key issues as they relate to specific species, such as the eastern timber wolf and grizzly bear, as well as addressing issues by types of species and sets of problems. For example, the large predators like the grizzly and wolf pose a similar problem in that there is a question of how large a population society will tolerate.

"Of course, society includes people living far away and right in or near wolf and bear habitats. Consequently the tolerance level differs quite a bit, according to proximity. Our task will be to lay out the alternatives from an environmental standpoint. As has been true in the

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Photo by D. B. Means

Endangered status proposed for Florida pine barrens treefrog (see page 5)

EIS (continued from page 1)

past in some Endangered Species Program actions, we do not expect everyone will agree that the alternatives eventually selected by the decisionmakers are best for them. But the purpose of an EIS is to figure out the best way to protect the environment, and in this case specifically to protect endangered species. These are our primary concerns."

Engel says the EIS will include an overall statement of the Service's Endangered species mission—and under that mission, the long- and short-term goals. In his words:

"I expect the most frustrating part of writing the statement will be in trying to get everyone to agree on the goals and where we should be in 10 years or how we will get there. For every 10 people we are going to get 10 different ideas. And that holds true in setting priorities."

Goals and Priorities

The EIS team will not be starting from scratch. Engel says the team will be drawing upon a draft program management document (PMD) recently prepared by the Endangered Species Program, a draft EIS prepared in 1973 for an Administration-proposed Endangered Species Act (H.R. 4758), which differed somewhat from the final 1973 act, and a draft EIS for implementing the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

The draft PMD sets forth goals for the program and also contains a priority system to help determine which Endangered species should get first call on available resources. Generally, the PMD recommends priority for U.S. species over foreign species, and for full species over subspecies or populations. It estimates there are now about 2,500 taxa for which sufficient data can be assembled for listing as Endangered or Threatened in the next two years. The PMD says there are an additional 6,500 taxa that could be listed by 1985.

Engel says the team will be looking beyond the PMD since it will be developing alternatives that weigh the various budgetary, political, manpower, and expertise constraints on goals over the next decade.

Moreover, the EIS writers will be looking at the State grant-in-aid formula to ensure that it reflects the "best mix" of available resources.

In Engel's view, the Endangered Species Program has been undergoing a period of development for the past three years. Much time and effort has been spent in formulating regulations and guidelines and in learning how to execute the many administrative tasks demanded by the law—that is, assembling a "vehicle."

"The EIS is in a logical sequence to tie everything together," he adds. "We have the vehicle, and the EIS will tell us how to get where we want to go."

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Law (continued from page 1)

Species Act of 1973. The Columbia Dam would eliminate half of the total known population of Dutton's river snail *(Io armigera duttoniana)*, recently proposed for listing as Threatened and for Critical Habitat designation. Under the proposed amendment, any adverse effects on Endangered or Threatened species caused by the dams would "not be deemed to be a taking of any endangered species" within the meaning of section 9, or a taking of a Threatened species if prohibited by regulation under section 4.

An amendment (S. 363) offered by Senator James A. McClure (R-Idaho) would require the filing of a full environmental impact statement in conjunction with the designation of "any area or areas as critical habitats."

Financial losses to farmers and others from eastern timber wolf predation have prompted Representative James L. Oberstar (D-Minn.) to seek a pilot program for compensation. H.R. 1966 would set up a Federal-State project to compensate owners for verifiable destruction of or injury to livestock and pets by timber wolves in Minnesota; $600,000 would be authorized to carry out the pilot program through September 30, 1981. Oberstar's measure also would establish a $100,000 study to survey the type and extent of damage caused by wolves and determine what could be done to mitigate it.

Companion bills (S. 1316 and H.R. 4741) have been introduced by Senator John C. Culver (D-Iowa) and Representative Robert L. Leggett (D-Calif.) to extend the authorization of grant-in-aid funds for the States at $3 million a year in fiscal years 1978, 1979, and 1980. A total of $6 million was appropriated for grants-in-aid for FY 1976 and FY 1977.

Another bill introduced by Representative Leggett (H.R. 6405) would relax some of the prerequisites for a State to enter into a cooperative agreement with the Service. It would amend section 6(c) of the act by enabling a State to enter into a cooperative agreement even if it lacked authority to regulate and manage some resident listed taxa, if the State and the Secretary of the Interior can agree on a priority program for those listed species for which the State does have authority. The proposed amendment would also make it possible for a State that has become newly interested in endangered species, without a past history of conservation programs, to obtain the agreement. Finally, it would authorize a total of $16 million for grants-in-aid for fiscal years 1978 through 1981.

Representative Lindy Boggs (D-La.) has introduced H.R. 4568 to exempt antique articles made from Endangered or Threatened species from import restrictions under section 9 of the law. The articles would have to be eligible as 100-year-old antiques under Federal tariff classifications.

State Report

California Steps Up Efforts To Protect 67 Endangered, Threatened, Rare Species

California Department of Fish and Game photo

San Joaquin kit fox is fitted with radio collar for management study

Rapid population growth and accompanying economic development are continuing to swallow up habitat that once supported a richly varied and abundant wildlife in California.

State authorities are predicting that, at the present growth rate, California's population will swell to 56 million by the year 2020—more than double the current total of 22 million.

"When the valleys and coastal plains fill up with people and irrigated croplands, little will remain of the natural ecosystems that once supported California's unique flora and fauna," says Howard R. Leach, nongame wildlife coordinator for the California Department of Fish and Game, and also the head of the State's endangered wildlife program.

Half of the State's acreage is in public ownership, much of it mountain and desert terrain. But as wildlife habitat, it too is subject to pressure through resource development and heavy recreational usage.

First State ES Act

Californians have a constant reminder of the State's depletion of wildlife resources, in that the State emblem carries a picture of the grizzly bear—which was extirpated in the State early in this century.

Over the past decade, the State has adopted an increasingly aggressive stance to prevent other unique species going the way of the grizzly. Among these are the California condor (*Gymnogyps californianus*), southern bald eagle (*Haliaeetus leucocephalus leucocephalus*), Morro Bay kangaroo rat (*Dipodomys heermani morroensis*), Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*), and blunt-nosed leopard lizard (*Crotaphytus silus*).

In 1970, the California legislature enacted the first State endangered species legislation. The California Species Preservation Act directed the California Department of Fish and Game to inventory California's threatened species and report to the governor and legislature biennially on the status of these animals.

Under the State's Endangered Species Act, also passed in 1970, the State Fish and Game Commission has listed 49 animals as endangered or rare (18 additional species occurring in the State are listed as Endangered or Threatened by the Federal program).

There is also State legislation to identify and protect endangered and rare native plants. The California Native Plant Society has identified some 600 plants that it believes are endangered or rare. Many of these are candidates for listing under the Federal act as well.

Habitat Acquisition

Howard Leach recalls that, prior to 1970, the California Department of Fish and Game, like similar agencies in other States, was largely concerned with game species. A nongame wildlife program—Special Wildlife Investigations—was started in 1968 with $56,400 in Federal Pittman-Robertson Act funds for restoration of wildlife. "We compiled a listing of 129 animals native to California whose status was undetermined and undertook a study of shorebirds and seabirds," Leach says. "At the time we weren't particularly concerned with endangered species."

Also in 1968, the California legislature passed the Ecological Reserve Act, giving the California Department of Fish and Game the authority to acquire lands and waters supporting endangered species or unique habitats. When the environmental movement of the 1970's began sweeping the State and the Nation—thereby focusing more attention on endangered wildlife—this law became a key part of the California nongame program, along with other legislation to fund the acquisition of habitat.

Currently, the nongame program is budgeted at $2.5 million a year, including $676,000 in State and Federal funds earmarked specifically for endangered species. Much of the money goes into the purchase of habitat.

Since 1970, the State has established 18 ecological reserves—corresponding to Federal natural research areas—for scientific study and public use. (The California Natural Areas Coordinating Council has drawn up a list of 2,300 natural areas, many of which qualify as ecological reserves. A significant number are already in State or Federal ownership.)

Federal-State Programs

In FY 1977, California received an Endangered Species Program grant of $450,000. Part of the money was earmarked for the purchase of an ecological reserve for the Morro Bay kangaroo rat.

The nearby Morro Rock Ecological Reserve—an 80-foot high outcrop at the entrance to Morro Bay at San Luis Obispo—shelters a pair of nesting American peregrine falcons (*Falco peregrinus anatum*). The Rock is under the administration of the California Department of Parks and Recreation. It is protected by special provisions of the Fish and Game Code and constitutes an example of interagency cooperation within the State.

Extensive studies are being performed on the habitat needs of the San Joaquin kit fox (*Vulpes macrotis mutica*) and the blunt-nosed leopard lizard to support recommendations that have been made for Critical Habitat determination. Accelerated land leveling for farming and industry development in the San Joaquin Valley has reduced these species to a marginal existence in some areas of the valley. The fox is listed as Endangered by the Federal program and as rare by California, which estimates the population at 10,000. The foothills population of the fox, still unaffected by development, appears to be stable.

In the San Francisco Bay area, efforts are underway to preserve habitat for the salt marsh harvest mouse (*Reithrodontomys raviventris*), distinctive for its ability to drink salt water.

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RULEMAKINGS
April 1977

Look-Alike Crocodilians Proposed for Treatment As Endangered Species

To provide further protection for Endangered crocodilians, the Service has proposed treating eight other species and subspecies of crocodilians as Endangered under the terms of the "similarity of appearance" clause of the Endangered Species Act of 1973 (F.R. 4/6/77).

The eight "look-alike" species and subspecies are the brown caiman *(Caiman crocodilus fuscus)*; the common caiman *(Caiman crocodilus crocodilus)*; the dwarf caiman, or Cuvier's smooth-fronted caiman *(Paleosuchus palpebrosus)*; Schneider's smooth-fronted caiman *(Paleosuchus trigonatus)*; the American crocodile *(Crocodylus acutus)* other than the Florida population (which is classified as Endangered); Johnston's crocodile *(Crocodylus johnstoni)*; the New Guinea crocodile *(Crocodylus novaequineae novaequineae)*; and the salt water crocodile *(Crocodylus porosus)*.

Five of the proposed look-alikes also are included in a petition submitted to the Service by Dr. Frederico Medem of Colombia; he recommends that they be listed as Endangered in their own right. The biological status of these five currently is being reviewed by the Service's Office of Endangered Species.

Two of the other species identified in Medem's petition already are listed as Endangered. They are among the total of twenty species and subspecies of crocodilians designated as Endangered.

Differentiating among Crocodilians

The eight look-alikes so closely resemble Endangered species that agents of the Service's Division of Law Enforcement have difficulty differentiating among Endangered and non-Endangered species. This holds true

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BOX SCORE OF SPECIES LISTINGS

Category	Number of Endangered Species			Number of Threatened Species		
	U.S.	Foreign	Total	U.S.	Foreign	Total
Mammals	36	227	263	2	17	19
Birds	66	144	210	1		1
Reptiles	8	46	54	1		1
Amphibians	4	9	13	1		1
Fishes	30	10	40	4		4
Snails		1	1			
Clams	22	2	24			
Crustaceans						
Insects	6		6	2		2
Plants						
Total	172	439	611	11	17	28

Number of species currently proposed: 94 animals
1850 plants (approx.)
Number of Critical Habitats proposed: 41
Number of Critical Habitats listed: 6
Number of Recovery Teams appointed: 57
Number of Recovery Plans approved: 8
Number of Cooperative Agreements signed with States: 17

April 30, 1977

PENDING RULEMAKINGS

The Service expects to issue rulemakings on the subjects listed below during the next 90 days. Final decisions will depend upon completion of the analysis of comments received and/or new data made available, with the understanding that such analysis may result in either modification of the content or timing of the original proposal, or issuance of a negative decision.

For each of the following subjects, the status or action being considered is given in parentheses.

Pending Final Rulemakings

- Plant regulations
- Captive self-sustaining populations regulations
- Bald eagle (modification of status in Lower 48 States)
- Marianas mallard (Endangered)
- Leopard darter (Threatened)
- Slackwater darter, Alabama cavefish, spotfin chub, slender chub, yellowtin madtom (Endangered)
- 26 snails (Endangered and Threatened)
- St. Croix ground lizard (Endangered)
- Giant anole (Endangered)
- San Clemente Island species (Endangered and Threatened)
- 14 plants (Endangered and Threatened)
- Florida everglade kite (Critical Habitat)
- Peregrine falcon, California (Critical Habitat)
- Palila, Hawaii (Critical Habitat)
- Cape Sable sparrow, Florida (Critical Habitat)
- Dusky seaside sparrow, Florida (Critical Habitat)
- Morro Bay kangaroo rat, California (Critical Habitat)

Pending Proposed Rulemakings

- Ozark big-eared bat (Endangered)
- Virginia big-eared bat (Endangered)
- African elephant (similarity of appearance to Asian elephant)
- Timber wolf (modification of status in Lower 48 States)
- 11 U.S. beetles

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California (continued from page 3)

Endangered species activities in FY 1977 are concentrated on the species determined to be most critically endangered. These include the California condor, southern bald eagle, Aleutian Canada goose (*Branta canadensis leucopareia*), American peregrine falcon, light-footed clapper rail (*Rallus longirostris levipes*), California least tern (*Sterna albifrons browni*), Morro Bay kangaroo rat, and a total of six species of butterflies.

Fish, Amphibians, Reptiles

The California Department of Fish and Game, Inland Fisheries Branch, has set up a program (similar to the nongame wildlife program) to protect endangered fish, reptiles, and amphibians. In FY 1977, this program, budgeted at $104,000, provided for population and habitat surveys, identification and taxonomic analysis, life history investigations, and management.

Among the fish involved in the program are the Mohave chub *(Gila mohavensis)*, Owens River pupfish *(Cyprinodon radiosus)*, Tecopa pupfish *(Cyprinodon nevadensis calidae)*, Colorado River squawfish *(Ptychocheilus lucius)*, and unarmored threespine stickleback *(Gasterosterus aculeatus williamsoni)*—all listed as Endangered by both the State and Federal programs. Three other species of chubs and three species of suckers are listed as endangered by the State.

Biologists recently have discovered two apparently pure populations of Lahontan cutthroat trout *(Saimo clarki henshawi)* in creeks in Fresno and Tuolumne counties and are attempting to determine their status. This trout was reclassified from Endangered to Threatened under the Federal program in 1975; the California population remains at 1,500 adults, according to the State, which recently has begun a program to reestablish this native subspecies in additional waters within its native range.

Program Management

Until last year, the State's nongame program operated with a limited staff of three biologists, a secretary, and 36 man-months of seasonal aid time with assistance from field personnel in various other departmental functions. The $450,000 grant to California by the Federal Endangered Species Program in FY 1977 enabled the State to assign four biologists to the endangered species program to augment the work of the State's six regional offices.

Leach says: "Our regional offices are responsible for inventory and for keeping apprised of factors affecting the welfare of endangered species, including the review of environmental impact reports and enforcement of protective laws."

The Inland Fisheries Branch now has two biologists—one for fishes and invertebrates, and the other for reptiles and amphibians. They develop research and management projects and assist in surveys, inventories and habitat protection programs. Steve Nicola is in charge of the program.

To stretch out limited funds for research and meet an increasing workload, the California Fish and Game Department has turned to university students and graduates, contracting with them personally, rather than with the university.

"This way," Leach says, "the student receives the funds directly. He or she works under our supervision and receives credit for the research. The research reports are prepared as wildlife administrative reports, thus getting the data into print right away." Students are then free to seek formal publication in scientific journals.

Interagency Cooperation

California's program is dependent upon interagency cooperation—both State and Federal—and the help of private conservation groups.

California's fish and game department makes a biennial report to the governor and legislature entitled "At the Crossroads," which gives the status of each endangered or rare species. In the most recent report (January 1976), credit was given to the contributions made by other governmental agencies. For example, the State Department for Parks and Recreation established natural reserves within the park system for the California least tern and the yellow-billed cuckoo *(Coccyzus americanus occidentalis)*, which is listed as rare by the State; the Department also preserved habitat for the Morro Bay kangaroo rat and the Peninsular bighorn sheep *(Ovis canadensis cremnobates)*, also listed as rare.

The State Lands Commission was instrumental in acquiring Bair Island Ecological Reserve in San Francisco Bay for the salt marsh harvest mouse, California clapper rail, and California least tern. The State Department of Transportation assisted in restoring Valencia Lagoon for the Santa Cruz long-toed salamander, and the State Department of Forestry currently was supporting the protection of other species through California's new Forest Practices Act. The 1976 report adds:

"Federal agencies such as the U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Bureau of Reclamation, and Bureau of Land Management have also made substantial contributions since 1970. Among these have been the establishment of Humboldt Bay, South San Francisco, San Pablo Bay, Anaheim Bay, and Hopper Mountain National Wildlife Refuges [by the Fish and Wildlife Service].

"In addition, Federal agencies have set aside critical habitats as Natural Research Areas and similar environmental protection units. Examples are the West Anacapa Island Natural Research Area for the California brown pelican. Hi-Mountain-Huff's Hole Endangered Species Habitat Area for the peregrine falcon and California Bighorn Sheep Zoological Area."

Various State and Federal activities are coordinated through an Endangered Species Interagency Coordinating Council. Among the many conservation groups associated with the program are the Citizen Nongame Advisory Committee (appointed by the director of the California Department of Fish and Game), California Natural Areas Coordinating Council, California Native Plant Society, National Audubon Society, Sierra Club, Nature Conservancy, and the National Wildlife Federation.

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Photo by A. I. Roest, California Polytechnic State University

Morro Bay kangaroo rat is benefiting from Federal grant to aid purchase of ecological preserve. Note incomplete hip stripe which differentiates it from other species having a full stripe.

Rulemakings (continued from page 6) even when agents have live or full-mounted specimens. Consequently, the Endangered species cannot be protected fully.

The brown caiman, common caiman, and New Guinea crocodile exemplify an additional difficulty in that they are all subspecies. Unfortunately, there are no readily identifiable external characteristics to distinguish subspecies of Endangered crocodilians from either non-Endangered species or other Endangered subspecies. Crocodilian subspecies can be identified only by cranial bone structure, internal organs, or geographical location.

Furthermore, it is very difficult for law enforcement personnel to identify crocodilian hides and parts; as Dr. F. Wayne King of the New York Zoological Society has noted, it is almost impossible even for expert herpetologists to determine the origin of finished crocodilian products. Tanning and dyeing alter the color of hides, and the manufacture of shoes, handbags, wallets, etc. often destroys all identifying characteristics.

Law Enforcement Difficulties

The difficulty in identifying and differentiating seriously hampers prosecution efforts under the Endangered Species Act of 1973, since successful prosecution requires proof that the items in question are from Endangered species. Consequently, the deterrent value of the act is greatly diminished. In addition, the direct threat to the Endangered species continues, for it is known that there is a heavy traffic in crocodilian hides and products and that many of the crocodilians involved are members of Endangered species.

Geographical location distinctions also create a major difficulty. For example, law enforcement agents often are powerless to prevent the taking, sale, transport, or export of American crocodiles because they cannot prove conclusively that the crocodile in question is from the critically Endangered Florida population and not from the non-Endangered populations elsewhere in the Americas.

The Service believes that the proposed rulemaking would increase protection of the Endangered species, restore deterrent value to the 1973 act, and substantially facilitate successful prosecution of violations of the act pertaining to crocodilians.

Comments on the proposed rulemaking should be submitted by July 6, 1977.

Pine Barrens Treefrog

To prevent extirpation of a unique member of the Florida gulf coast herpetofauna, the Service has proposed Endangered status and Critical Habitat designation for the Florida population of the pine barrens treefrog *(Hyla andersonii)* (F.R. 4/5/77).

The pine barrens treefrog occurs in South Carolina, North Carolina, New Jersey, and Florida. However, the Florida population, isolated from the others by distances of more than 750 kilometers (465 miles), is unique in its coloration pattern, mating calls, and body proportions. At present, its precise relationship to those other populations remains to be determined.

The Florida population was discovered in 1970 in Okaloosa and Walton counties in the Florida Panhandle. By 1972, however, all of the Walton County populations had been extirpated as a result of development and land clearing for agricultural purposes. The remaining seven populations in Okaloosa County now total less than 500 individuals. Consequently, seven small areas within the county have been proposed for Critical Habitat.

Florida state law currently protects the species against taking, possession, and specimen transport. The proposed rulemaking would provide habitat protection and additional discouragement to would-be collectors, especially through enforcement of interstate commerce prohibitions.

Comments are due by June 3, 1977.

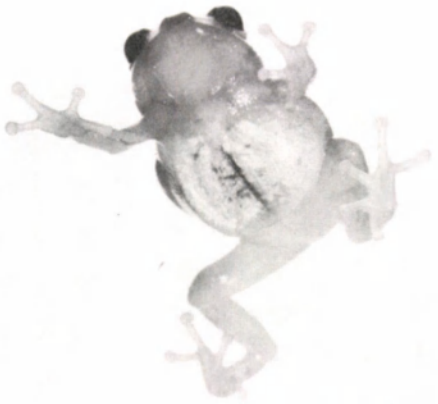

Photo by George E. Drewry

Underside view of a golden coqui on glass plate

Golden Coqui

Threatened status and Critical Habitat designation have been proposed for a recently discovered species of frog, the golden coqui *(Eleutherodactylus jasperi)*, and its territory in east-central Puerto Rico (F.R. 4/5/77).

A small, brightly colored, live-bearing amphibian, the golden coqui is found only in certain upland areas to the south of the town of Cayey, and it lives only in water-containing bromeliads of the genera *Vriesia, Hohenbergia,* and *Guzmania.*

Dense bromeliad growth appears to be a critical factor in determining the presence of golden coqui populations. Frog-inhabited plants usually occur in clusters, indicating that dispersal distances tend to be short.

The areas proposed for Critical Habitat consist of portions of Cerro Avispa, Monte el Gato, and Sierra de Cayey. Arranged in a semicircle 10 kilometers (6.25 miles) in radius, these areas all lie between 700 and 850 feet above sea level.

Because of their moderate rainfall and temperatures, these lands are in great demand for agricultural and other purposes. Consequently, human development represents the principal threat to the continued existence of the golden coqui.

Furthermore, the species' habitat is susceptible to fire damage. Prior to a fire in 1973, for example, one particular area was known to have golden coquis in bromeliads on the ground, in low trees, and on some large boulders. Only the frog-inhabited bromeliads on the boulders survived the fire.

In addition, the Service is concerned that the golden coqui's "unique reproductive adaptation and attractive coloration are likely to create a large demand for specimens for scientific, educational and display purposes."

The rulemaking under consideration would provide the first regulations for the protection and conservation of this species. Comments are due by June 6, 1977.

California (continued from page 4)

Howard Leach says the fish and game department's relations with Federal agencies at the local level generally have been rewarding, but problems do exist in implementing sections 4 and 7 of the Endangered Species Act. "In my opinion," Leach says, "there is urgent need for improvement in the Federal-State consultation process at the national level if the program is to work."

California strongly opposed the recent Federal designation of the southern sea otter *(Enhydra lutris nereis)* as Threatened (see February 1977 issue of BULLETIN) because the State feels the otters are expanding their range and depleting shellfish along the southern California coast. The State has approved in principle the California Condor Recovery Team's proposal to take some condors from the wild for captive breeding (see April 1977 issue of BULLETIN). But the department wants more detail on the cost and the breeding plans before giving final approval. Under the terms of California's cooperative agreement with the Federal Government, a State permit would be required before any condors could be taken from the wild.

Leach expresses his concern that too many states are relinquishing control over resident Endangered species to the Federal Government.

"It should be the responsibility of every State to determine what are their endangered species," he says, "and provide State funds to be matched with Federal funds to develop the programs."

Leach is hopeful that, with continued public and financial support, California's endangered wildlife program can meet the challenge to restore these animals to nonendangered status.

He adds, "California's program has come a long way in seven years, but we have much farther to go."

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